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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,874	02/18/2004	Jeong Dae Seo	K-0610	9489
34610	7590	05/01/2007		
KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200			EXAMINER THOMPSON, CAMIE S	
			ART UNIT 1774	PAPER NUMBER
			MAIL DATE 05/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/779,874	SEO ET AL.	
	Examiner	Art Unit	
	Camie S. Thompson	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed February 6, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 17 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 17 and 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's amendment and accompanying remarks filed February 6, 2007 are acknowledged.
2. Examiner acknowledges amended claims 1 and 8.
3. Examiner acknowledges newly added claims 20-25.
4. The rejection of claims 1-6, 8-14, 16-17 and 19 under 35 U.S.C. 102(e) as being anticipated by Tung et al., U.S. Patent Number 6,885,025 is overcome by applicant's amendment.
5. The rejection of claim 7 under 103(a) as being unpatentable over Tung et al., U.S. Patent Number 6,885,025 in view of Tutt et al., U.S. Pre Grant Publication 2006/0084347 is overcome by applicant's amendment.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

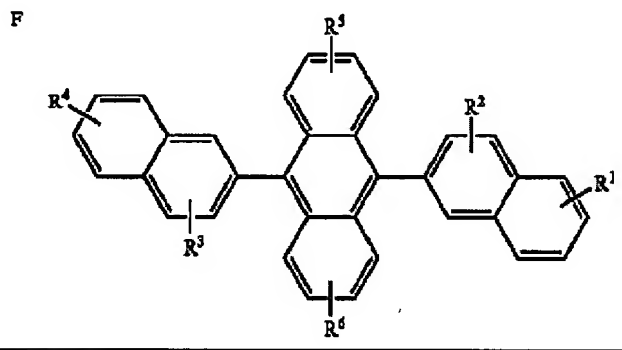
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-14, 17 and 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tutt et al., U.S. Pre Grant Publication 2006/0084347.

Tutt discloses a method for forming a color organic light-emitting device. Figure 3 of the reference describes an electrode formed on a substrate with an emission region comprising three emission areas wherein a hole blocking layer is formed on the emission layer (see also

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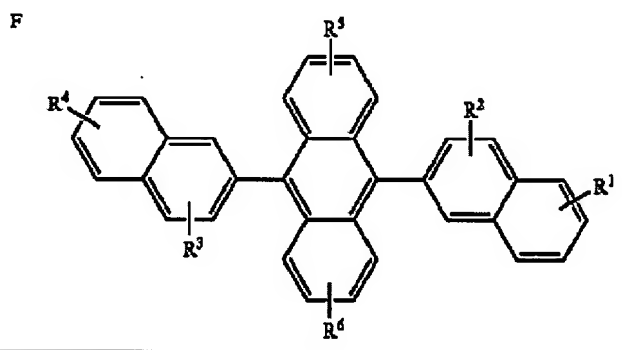
paragraphs 0124-0125). Also, the reference discloses that the hole blocking material can comprise an anthracene compound such as



Paragraph 0115 of the reference discloses that an electron-injecting layer may be present as well.

Paragraph 0076 of the reference discloses that the three emission areas are green, red and blue.

The reference also discloses that the first emission layer can comprise an electron transporting material or a hole transporting material and a dopant such as a fluorescent dye (see paragraphs 0076 and 0107). Paragraph 0079 of the reference discloses the use of metal complexes of 8-hydroxyquinoline for host materials suitable for green and red light emission. Paragraph 0093 of the reference discloses the used of anthracene derivatives such as



That can be use for blue. Reference claim 9 discloses that the first emissive layer produces a first colored light; the second emissive layer produces a second colored light and the third

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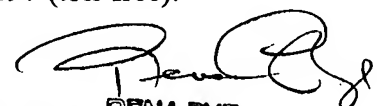
emissive layer produces a third colored light. Reference claim 9 does not provide for the specific colors for each particular emissive layer. However, the reference does disclose that the emissive colors are green, red and blue. Additionally, Tutt discloses that the emissive layer each have a different color emission (see paragraph 0009-0016). Therefore, it would have been obvious to one of ordinary skill in the art to have the first emissive layer as green emission; the second emissive layer as red emission and the third emissive layer as blue emission in order to obtain a full-color OLED device having a desired array of colored pixels.

Response to Arguments

8. Applicant's arguments with respect to the present claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena L Dye, can be reached at (571) 272-3186. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RENA DYE
SUPERVISORY PATENT EXAMINER
AU 1774